

Title (en)
INK-BASED LAYER FABRICATION USING HALFTONING TO CONTROL THICKNESS

Title (de)
HERSTELLUNG EINER TINTENBASIERTEN SCHICHT MITHILFE DER HALBTONRASTERUNG ZUR STEUERUNG DER DICKE

Title (fr)
FABRICATION DE COUCHE À BASE D'ENCRE EN UTILISANT LA CRÉATION DE GRISÉS POUR CONTRÔLER UNE ÉPAISSEUR

Publication
EP 3079911 A1 20161019 (EN)

Application
EP 14870074 A 20140812

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• US 201361915149 P 20131212
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• US 201462005044 P 20140530
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Abstract (en)
[origin: US8995022B1] An ink jet process is used to deposit a material layer to a desired thickness. Layout data is converted to per-cell grayscale values, each representing ink volume to be locally delivered. The grayscale values are used to generate a halftone pattern to deliver variable ink volume (and thickness) to the substrate. The halftoning provides for a relatively continuous layer (e.g., without unintended gaps or holes) while providing for variable volume and, thus, contributes to variable ink/material buildup to achieve desired thickness. The ink is jetted as liquid or aerosol that suspends material used to form the material layer, for example, an organic material used to form an encapsulation layer for a flat panel device. The deposited layer is then cured or otherwise finished to complete the process.

IPC 8 full level
B41J 2/205 (2006.01); **H10K 99/00** (2023.01)

CPC (source: CN EP KR US)
B05C 11/10 (2013.01 - US); **B32B 33/00** (2013.01 - CN); **B32B 37/0046** (2013.01 - CN); **B41J 2/01** (2013.01 - CN KR US); **B41J 2/04581** (2013.01 - US); **B41J 2/2054** (2013.01 - CN EP US); **B41J 2/21** (2013.01 - CN US); **B41J 3/407** (2013.01 - CN KR US); **B41J 11/002** (2013.01 - CN); **B41J 11/00214** (2021.01 - KR); **B41J 29/393** (2013.01 - CN); **B41M 3/00** (2013.01 - US); **B41M 5/0047** (2013.01 - CN US); **B41M 7/00** (2013.01 - CN); **B41M 7/0081** (2013.01 - US); **B41M 7/009** (2013.01 - CN); **H01L 21/02288** (2013.01 - CN US); **H01L 21/67126** (2013.01 - CN US); **H01L 22/12** (2013.01 - CN US); **H01L 22/26** (2013.01 - CN US); **H01L 31/0203** (2013.01 - CN US); **H01L 31/048** (2013.01 - CN US); **H01L 33/52** (2013.01 - CN US); **H01L 33/54** (2013.01 - CN US); **H04N 1/405** (2013.01 - US); **H10K 50/84** (2023.02 - US); **H10K 50/844** (2023.02 - US); **H10K 59/1201** (2023.02 - CN); **H10K 71/00** (2023.02 - US); **H10K 71/135** (2023.02 - CN EP KR US); **H10K 71/70** (2023.02 - CN US); **B32B 2037/0069** (2013.01 - CN); **B41M 7/009** (2013.01 - US); **H01L 33/56** (2013.01 - US); **H01L 2933/005** (2013.01 - CN US); **H10K 50/8445** (2023.02 - CN EP US); **H10K 59/1201** (2023.02 - US); **H10K 59/8731** (2023.02 - US); **Y02E 10/549** (2013.01 - EP KR US); **Y02P 70/50** (2015.11 - EP US)

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BA ME

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US 8995022 B1 20150331; CN 105793051 A 20160720; CN 105793051 B 20171208; CN 107672334 A 20180209; CN 107672334 B 20201127; CN 107745588 A 20180302; CN 107745588 B 20200414; CN 107825886 A 20180323; CN 107825886 B 20200414; CN 107825887 A 20180323; CN 107825887 B 20200407; CN 107878058 A 20180406; CN 107878058 B 20200424; CN 107901558 A 20180413; CN 107901558 B 20200421; CN 107901645 A 20180413; CN 107901645 B 20191210; CN 107933089 A 20180420; CN 107933089 B 20200811; EP 3079911 A1 20161019; EP 3079911 A4 20180124; EP 3079911 B1 20200729; JP 2017205764 A 20171124; JP 2017507768 A 20170323; JP 2018125308 A 20180809; JP 2018125309 A 20180809; JP 2018144038 A 20180920; JP 2022008559 A 20220113; JP 2024001010 A 20240109; JP 6363707 B2 20180725; JP 6649983 B2 20200219; JP 6902496 B2 20210714; KR 102007618 B1 20191021; KR 102034420 B1 20191108; KR 102103684 B1 20200529; KR 102182788 B1 20201125; KR 102221640 B1 20210303; KR 102292676 B1 20210823; KR 102348020 B1 20220107; KR 102456355 B1 20221018; KR 102495563 B1 20230206; KR 102541161 B1 20230608; KR 102680609 B1 20240701; KR 20160098376 A 20160818; KR 20180125053 A 20181121; KR 20190093676 A 20190809; KR 20190119667 A 20191022; KR 20200042024 A 20200422; KR 20200133014 A 20201125; KR 20210024670 A 20210305; KR 20210106578 A 20210830; KR 20220005629 A 20220113; KR 20220143169 A 20221024; KR 20230023052 A 20230216; KR 20230084334 A 20230612; KR 20240108539 A 20240709; TW 201526224 A 20150701; TW I651847 B 20190221; US 10522425 B2 20191231; US 10586742 B2 20200310; US 10811324 B2 20201020; US 11088035 B2 20210810; US 11456220 B2 20220927; US 11551982 B2 20230110; US 2015171368 A1 20150618; US 2017054078 A1 20170223; US 2017084882 A1 20170323; US 2017140999 A1 20170518; US 2017141353 A1 20170518; US 2017141357 A1 20170518; US 2018061719 A1 20180301; US 2018061720 A1 20180301; US 2019371684 A1 20191205; US 2021343602 A1 20211104; US 2023147887 A1 20230511; US 9496519 B2 20161115; US 9755186 B2 20170905; US 9806298 B2 20171031; US 9831473 B2 20171128; WO 2015088592 A1 20150618

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